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CHAPTER 1

Te Kotahitanga

Introduction

Te Kotahitanga is a phased research and development project that commenced in 2001. Its aim is to improve the educational achievement of indigenous Māori students in public mainstream secondary school classrooms in New Zealand. The project provides teachers with professional learning opportunities to support their implementation of a culturally responsive pedagogy of relations (Bishop, 2008), which is characterised by the development of caring and learning relationships between teachers and Māori students. This chapter situates the project within the international context, and describes its commencement, its main components, how it was implemented in the first phases of the project from 2001 until 2009, and how the experiences of the schools' leaders helped us to develop the project into a more comprehensive school reform model.

The international context

Following the ethnic revitalisation movements in the United States, Australia, and New Zealand in the 1960s and 1970s, the call for self-determination by marginalised groups has meant that many previously unheard voices began to challenge the prevailing discourses of assimilation and integration. These groups also began to insist that they

be able not only to participate in the national civic culture and community, but also to maintain their own languages and cultures. In schooling, these demands led to a focus on improving the engagement of indigenous and other minoritised students in education by emphasising the importance of transforming teaching practices and school cultures to be inclusive of and/or responsive to these students' cultural experiences and values.

There is an ongoing issue of educational disparities that characterise indigenous peoples in many countries and continue to plague them for the rest of their lives. For example, the educational disparities that afflict Māori are stark. The overall academic achievement levels of Māori students are low; more leave school without any qualifications than do their non-Māori counterparts; their retention rate to age 17 is far lower than that for non-Māori; their rate of suspension from school is three to five times higher, depending on gender; they are over-represented in special education programmes for behavioural issues; they enrol in preschool programmes in lower proportions than other groups; they tend to be over-represented in low-stream education classes; they receive less academic feedback than do children of the majority culture; they are more likely than other students to be found in vocational curriculum streams; they leave school earlier, with fewer formal qualifications; and they enrol in tertiary education in lower proportions (Hood, 2008; Ministry of Education, 2010). Although these outcomes are most clearly exhibited in secondary schools, the foundations for these problems commence in the primary school years. Indeed, there are indications (Crooks, Hamilton, & Caygill, 2000; Wylie, Thompson, & Lythe, 1999) that while there are achievement differentials evident when children enter primary school, it is by Years 4 and 5 that these achievement differentials begin to stand out starkly.

The Education Counts website (www.educationcounts.govt.nz) identifies a substantial body of evidence that demonstrates that students who are not well served by the education system are heavily disadvantaged later in life, in terms of their earning and employment potential and their health and wellbeing. For example, those with higher levels of education are more likely to participate in the labour market, face lower risks of unemployment, have greater access to further training, and receive higher earnings on average. Conversely, people with no formal school qualifications have unemployment rates far exceeding those with qualifications and have the lowest median incomes:

> In 2006, the unemployment rate for those with a bachelor's degree or higher was 2.1 percent; for those with another tertiary qualification 2.9 percent; with only a school qualification 4.1 percent; and with no qualification 5.2 percent … The median weekly income for those with bachelors' and higher degrees was $785; for those with other tertiary qualifications it was $575; for those with school qualifications it was $335; and for those with no qualifications $310. (Education and Science Committee, 2008, pp. 10–11)

The Education Counts website also contends that young people leaving school without any qualifications may have difficulty performing in the workforce and may face difficulties in terms of lifelong learning or returning to formal study in later years. It suggests that a considerable number of research studies show a strong connection between early school leavers and unemployment and/or lower incomes, which are in turn generally related to poverty and dependence on income support.

Research studies that focus on improving the engagement of indigenous students in education often emphasise that a range of solutions is needed to address the educational disparities. These include:

- Changing who the educational leaders are—through indigenous teacher training initiatives (Lipka, 1998)
- altering school decision-making structures (Bishop et al., 2010)
- infusing cultural content into classrooms (Demmert & Towner, 2003)
- strengthening teacher and student relationships by enabling culturally responsive classroom pedagogies (Bishop, 2008; Gay, 2000)
- making the school more affirming of indigenous cultures through community engagement efforts (Sarra, 2011), preferably with a strong focus on "sovereignty and self-determination, racism, and indigenous epistemologies" (Castagno & Brayboy, 2008, p. 941).

New Zealand's Te Kotahitanga is a kaupapa Māori (Māori agenda/philosophy) research and development project that seeks to address many of these issues by promoting an education in which:

- power is shared between self-determining individuals (rangatiratanga) within non-dominating relations of interdependence (Young, 2005)
- culture counts (taonga tuku iho)
- learning is interactive, dialogic and spirals (ako)
- participants are connected and committed to one another (whanaungatanga) through the establishment of a common vision (kaupapa) of what constitutes educational excellence (Kotahitanga: Unity of Purpose).

Te Kotahitanga is kaupapa Māori in that it draws on Māori understanding and sense-making processes and seeks to address Māori people's aspirations for self-determination within the wider context of a post-colonial reality (Bishop, 2008). The project seeks to implement this vision by engaging teachers of indigenous students in:

- discursive (re)positioning (Davies & Harré, 1990, 1999)
- strategic goal setting (Robinson, Hohepa, & Lloyd, 2009)
- the implementation of culturally responsive pedagogies (Gay, 2000)
- the re-institutionalisation of the decision-making processes within schools (Coburn, 2003; Hargreaves & Fink, 2006)

- the development of distributed leadership (Spillane, Halverson, & Diamond, 2004)
- the inclusion of the indigenous community (Durie, 2006)
- the effective use of evidence of student performance (Earl & Katz, 2006).

It also seeks to assist schools to take ownership of the problems and the means of solving them (Coburn, 2003).

Te Kotahitanga addresses the major challenge facing education in New Zealand today, which is the continuing social, economic and political disparities within our nation, primarily between Pākehā majority culture students (in New Zealand these students are primarily of European descent) and Māori. These disparities are also reflected at all levels of the education system (see Box 1.1 for further details).[3]

Box 1.1: Some educational disparities

- In 2009, 23% of Māori boys and 35% of Māori girls achieved University Entrance, compared to 47% and 60% of their non-Māori counterparts (Ministry of Education, 2010).
- In 2010, Māori students were twice as likely to leave school at the age of 15 than Pākehā students (Ministry of Education, n.d., a).
- Only 28% of Māori boys and 41% of Māori girls left school in 2009 with the third level of national qualifications or above, compared to 49% and 65% of their non-Māori counterparts (Ministry of Education, 2010).
- In 2009, the retention rate to age 17 was 45.8% for Māori, compared to 72.2% for non-Māori (Ministry of Education, n.d., b).
- The Māori suspension rate is 3.6 times higher than the Pākehā rate (Ministry of Education, 2009).
- Although 89.4% of Māori new entrants had attended preschool programmes in 2010, 98.1% of Pākehā/European new entrants had done so (Ministry of Education, n.d., c).

In addition, the dominance of non-Māori teachers within the education system mirrors the mismatch identified by Villegas and Lucas (2002) in the United States: 9% of teachers are Māori, whereas 22% of the student population are Māori, thus creating a cultural mismatch between the majority of teachers and their Māori students.

3 A similar pattern is to be found in the United States, where Villegas and Lucas (2002) point out that "[h]istorically, members of economically poor and minority groups have not succeeded in schools at rates comparable to those of their white, middle-class, standard English-speaking peers" (p. xi). In Europe, the migrations of people from previous colonies and elsewhere with their different age structures and birth rates has created a similar pattern of diversity and disparity among the school-aged population, where sizeable groups of ethnic and religious minorities are now evident in most towns and cities (Organisation for Economic Co-operation and Development, 2007).

Box 1.2: The Te Kotahitanga Effective Teaching Profile

Effective teachers of Māori students create a culturally appropriate and responsive context for learning in their classroom. In doing so they:

a. positively and vehemently reject deficit theorising as a means of explaining Māori students' educational achievement levels (and PD projects need to ensure that this happens)
b. know and understand how to bring about change in Māori students' educational achievement and are professionally committed to doing so (and PD projects need to ensure that this happens).

They do this in the following observable ways:

1) Manaakitanga: They care for the students as culturally located human beings above all else. *(Historically 'mana' refers to authority and 'akiaki' to the task of urging someone to act. 'Manaakitanga' refers to the task of building and nurturing a supportive and caring environment.)*

2) Mana motuhake: They care for the performance of their students. *(In modern times 'mana' has taken on various meanings, such as legitimation and authority, and can also relate to an individual's or a group's ability to participate at the local and global level. 'Mana motuhake' involves the development of personal or group identity and independence.)*

3) Whakapiringatanga: They are able to create a secure, well-managed learning environment by incorporating routine pedagogical knowledge with pedagogical imagination. *('Whakapiringatanga' is a process wherein specific individual roles and responsibilities are required to achieve individual and group outcomes.)*

4) Wānanga: They are able to engage in effective teaching interactions with Māori students as Māori. *(As well as being known as a Māori centre of learning, a wānanga as a learning forum involves a rich and dynamic sharing of knowledge. With this exchange of views, ideas are given life and spirit through dialogue, debate and careful consideration in order to reshape and accommodate new knowledge.)*

5) Ako: They can use a range of strategies that promote effective teaching interactions and relationships with their learners. *('Ako' means to learn, as well as to teach. It refers both to the acquisition of knowledge and to the processing and imparting of knowledge. More importantly, ako is a teaching–learning practice that involves teachers and students learning in an interactive dialogic relationship.)*

6) Kotahitanga: They promote, monitor and reflect on outcomes that in turn lead to improvements in educational achievement for Māori students. *('Kotahitanga' is a collaborative response towards a commonly held vision, goal or other such purpose or outcome.)*

Source: Bishop et al., 2003

The commencement of the project and the development of the Effective Teaching Profile

The project commenced in 2001 with a series of in-depth interviews with Māori students, those parenting them, their teachers, and their principals about the causes of and solutions to ongoing educational disparities between Māori students and their non-Māori peers. The aim of these interviews was to identify the lived schooling experiences of Māori students and those most closely involved with their education.

In these narratives (Bishop & Berryman, 2006), most teachers clearly expressed their desire to positively support Māori students' learning, yet spoke at length of their frustration at not being able to engage these students in what they had to offer. When asked to explain why they were unable to engage these students, most teachers identified what they saw as Māori students' deficiencies as the main reason for their low achievement. They explained that it was these deficiencies—such as poor parental support, low educational aspirations and limited skills and knowledge—that limited Māori students' progress. As a result of these deficit perspectives, only a small minority of the teachers interviewed were able to offer any positive suggestions for improving Māori students' learning. Most spoke of behaviour modification or remedial programmes, or ignored the classroom context to suggest that solutions lay outside their domain, including changing parents' behaviours and attitudes and/or the structure of the school or the education system. In other words, most solutions lay outside their dominion as classroom teachers.

These views were in sharp contrast with those of the students (and of their parents, school principals and a minority of their teachers). The students unanimously identified that it was the quality of in-class relationships and interactions they had with their teachers that were the main determinants of their educational achievement. In their narratives, students went on to suggest ways that teachers could create a context for learning in which Māori students' educational achievement could improve—primarily by changing the ways teachers relate to and interact with Māori students in their classrooms. In other words, according to Māori students, what was needed to improve Māori students' achievement was for teachers to develop and adopt a relationship-based pedagogy in their classrooms. It was apparent to them that teachers must relate to and interact with Māori students in a different way to the common practice if a change in Māori students' achievement were to occur.

On the basis of these suggestions from Years 9 and 10 Māori students, and the experiences of the students' caregivers, principals and teachers, together with information from relevant literature, the research team developed the Effective Teaching Profile (ETP) (see Box 1.2; Bishop, Berryman, Tiakiwai, & Richardson, 2003; Bishop & Berryman, 2009). The ETP identifies the problems that theorising from a deficit position creates for teachers and emphasises that rejecting deficit explanations

about Māori students' performance is a necessary initial step towards developing effective classroom pedagogies. This step is necessary because, as Marzano, Waters and McNulty (2005) argue, most educational innovations do not address the "existing framework of perceptions and beliefs, or paradigm, as part of the change process—an ontological approach", but rather assume "that innovation is assimilated into existing beliefs and perceptions" (p. 162). They go on to suggest that the reforms that are more likely to succeed are those that are fundamentally ontological, providing participants with an "experience of their paradigms as constructed realities, and an experience of consciousness other than the 'I' embedded in their paradigms" (p. 162). In other words, reforms need to provide teachers with experiences of how the discourses they draw from to explain their experiences (when educating Māori students in this case) can determine their subsequent relationships and interactions.

This insight reappears in several theories from a range of perspectives as widely divergent as those of Bruner (1996) and Foucault (1972), hence the focus in Te Kotahitanga on rejecting deficit theorising. As Sleeter (2005) suggests, with reference to American schooling

> [i]t is true that low expectations for students of color and students from poverty communities, buttressed by taken-for-granted acceptance of the deficit ideology, has been a rampant and persistent problem for a long time … therefore, empowering teachers without addressing the deficit ideology may well aggravate the problem. (p. 2)

In effect, if we think that other people have deficiencies, then our actions will tend to follow our thinking and the relationships we develop and the interactions we have with these people will tend to be negative and unproductive (Valencia, 1997). That is, despite teachers being well meaning and having the best intentions in the world, if teachers are led to believe that students with whom they are interacting are deficient, they will respond to them negatively. We were told time and again by many of the interview participants in 2001 (Bishop & Berryman, 2006) and again in 2004–2005 and 2007 (Bishop et al., 2007; Bishop et al., 2011) that negative deficit thinking on the part of teachers is fundamental to the development of negative relations and interactions between the students and their teachers, resulting in frustration and anger for all concerned.

Rejecting deficit theorising has been repeatedly shown over the past decade to be central to teachers making progress in their attempts to relate to and interact more effectively with Māori students (Bishop et al., 2003, Bishop et al., 2007, Bishop et al., 2011). This is because when teaching occurs, progress is decided upon and practices are modified as "a direct reflection of the beliefs and assumptions the teacher holds about the learner" (Bruner, 1996, p. 47). This means that "our interactions with others are deeply affected by our everyday intuitive theorizing about how other minds work" (Bruner, 1996, p. 45). To Foucault (1972), such theorising is seen in the images that teachers create

in their minds when explaining their experiences of their interactions with indigenous and other minoritised students. These images are expressed in the metaphors they use, which are in fact part of the language of the discourses on education that already exist and have done so for considerable periods of time, and which struggle against each other for explanatory power. It is through these metaphors that teachers subsequently explain and organise classroom relationships and activities.

Hence, discourses have a powerful influence on how teachers and those with whom they interact, understand or ascribe meaning to particular experiences and what eventually happens in practice. Particular discourses will provide teachers with a complex network of explanatory images and metaphors, which are then manifested in their positioning, which will largely determine how they think and act in relation to indigenous and other minoritised students.

The impact of teachers' discursive positioning on the student achievement of indigenous and other minoritised groups becomes clear when it is understood that some discourses hold positive and agentic solutions to problems that affect these students, while others do not. For example, if the discourse the teacher is drawing from explains indigenous and other minoritised students' achievement problems in their classroom as being due to inherent or culturally based deficiencies of the children, or of their parents and families, then the relationships and interactions that teachers develop with these children will be negative and the teachers will engage students in low-quality pedagogic content and skill programmes such as remedial activities, or resort to or maintain traditional transmission strategies (Shields et al., 2005; Young, 1990).

Perhaps not surprisingly, indigenous and other minoritised students will react to this experience negatively, with negative implications for their attendance (they will often 'vote with their feet'), engagement and motivation for learning (they will be met with behaviour modification and assertive discipline programmes), and achievement (which remains lower than children of the majority cultural groups in the classroom, and in many cases internationally the gaps continue to widen). Conversely, if the discourse offers positive explanations and solutions, then teachers are more likely to be able to act in an *agentic* manner; that is, see themselves as being able to develop quality caring and learning pedagogic relationships with indigenous and other minoritised students. When such contexts for learning are developed, such as in Te Kotahitanga classrooms, Māori students respond positively, with measurable increases in Māori student engagement, attendance, retention, motivation (Bishop et al., 2007; Meyer et al., 2010), and achievement (Bishop et al., 2011; Meyer et al., 2010).

It is the contention of many indigenous authors (Brayboy, 2005; Lomawaima, 2000; Sarra, 2011; Smith, G., 1997; Smith, L., 1999) and non-indigenous authors (Alton-Lee, 2003; Freire, 1997; Kincheloe & Steinberg, 1997; McLaren, 2003; Timperley, Wilson, Barrar & Fung, 2007; Valencia, 1997) that the product of long-term power imbalances

needs to be examined by educators at all levels. This includes their own cultural assumptions and a consideration of how they themselves might be participants in the systematic marginalisation of students in their classrooms, schools, and the wider system. Changing wider societal power imbalances may not be something teachers can attend to in their classrooms, but a critical consideration of the discourses they draw upon to explain their educational experiences offers them an opportunity to consider the part they might be playing in the wider societal power-plays that mediate Māori participation in schooling. In this way, the self-determination of teachers is acknowledged, just as they are encouraged to acknowledge the self-determination of Māori students.

Hence the first major dimension of the ETP is to promote agentic discursive (re)positioning by teachers so that they see themselves as agents of change, rather than as merely frustrated in their attempts to address the learning of Māori students by maintaining deficit explanations. This is evidenced in teachers developing caring and learning classroom relationships and interactions within their classrooms. This central understanding is manifested in teachers' classrooms when effective teachers demonstrate on a daily basis that they:

- care for the students as culturally located individuals
- have high expectations for students' learning
- are able to manage their classrooms and curricula so as to promote learning
- are able to engage in a range of discursive learning interactions with students or facilitate students to engage with others in these ways
- know a range of strategies that can facilitate learning interactions
- collaboratively promote, monitor, and reflect upon students' learning outcomes so as to modify their instructional practices in ways that will lead to improvements in Māori student achievement
- share this knowledge with the students (Bishop & Berryman, 2009).

The implementation of the ETP allows educators to create learning contexts that will improve the learning engagement and achievement of Māori students by developing learning–teaching relationships in which the following notions are paramount:

- *Power is shared:* Learners can initiate interactions; learners' agency to determine their own learning styles and sense-making processes is regarded as fundamental to power-sharing relationships, and collaborative critical reflection is part of an ongoing critique of power relationships.
- *Culture counts:* Classrooms are places where learners can bring who they are to the learning interactions in complete safety, and where their knowledge is acceptable and legitimate.
- *Learning is interactive and dialogic:* Learners are able to be co-inquirers (i.e., raisers of questions and evaluators of questions and answers); learning is active and

problem-based, integrated and holistic; learning is reciprocal (ako); knowledge is co-created; and classrooms are places where young people's sense-making processes and knowledge are validated and developed in collaboration with others.

- *Connectedness is fundamental to relations:* Teachers are committed to and inextricably connected to their students and the community, and school and home/parental aspirations are complementary.
- *There is a common vision:* There is an agenda for excellence for Māori in education.

In short, implementing the ETP provides an opportunity for educators to develop a context for learning that, following Gay (2000), Villegas and Lucas (2002), Sidorkin (2002), and Cummins (1995), we have described as a *culturally responsive pedagogy of relations.*

The Te Kotahitanga professional development programme

The ETP forms the basis of the Te Kotahitanga PD programme that is currently running in 49 secondary schools in New Zealand (Bishop et al., 2011). The aim of the PD programme is to support teachers to implement a culturally responsive pedagogy of relations in their classrooms by implementing the dimensions of the ETP.

In order to offer teachers the opportunity to engage with the central understandings of the ETP, the Te Kotahitanga PD programme commences by providing teachers with professional learning opportunities in which they can critically evaluate where they discursively position themselves when constructing their own images, principles and practices in relation to Māori and other minoritised students in their classrooms. Teachers are provided with ongoing opportunities to consider the implications of their discursive positioning on their own agency and for Māori students' learning. To this end, the students' narratives of experiences are used to provide teachers with the opportunity to reflect upon the experiences of others involved in similar circumstances to themselves, including—perhaps for the first time—the students.

Sharing these vicarious experiences of schooling enables teachers to reflect on their own understanding of Māori children's experiences, and consequently on their own theorising/explanations about these experiences, their consequent practice, and the likely impact of this theorising and practice on Māori student achievement. Practitioners are then able to express their professional commitment and responsibility for bringing about change in indigenous and other minoritised students' educational achievement by accepting professional responsibility for the learning of *all* of their students, not just those they can relate to readily.

Teachers are also supported to take an agentic position in their theorising about their practice. Positive classroom relationships and interactions are built upon positive, non-

deficit, agentic thinking by teachers about students and their families. Agentic thinking views the students as having many experiences that are relevant and fundamental to classroom interactions. This agentic thinking by teachers means they see themselves as being able to solve problems that come their way, and as having recourse to skills and knowledge that can help all of their students. These notions are based on the non-deficit understanding that all students can achieve, no matter what.

Agentic thinking is fundamental to the creation of learning contexts in classrooms where young Māori people are able to be themselves as Māori, to bring who they are into the classroom; where Māori students' humour is acceptable; where students can care for and learn with each other; where being different is acceptable; and where the power of Māori students' own agency as learners is fundamental to classroom relations and interactions. Indeed, the interdependence of self-determining participants in the classroom creates vibrant learning contexts, which are characterised by the growth and development of quality learning relationships and interactions. This in turn increases student attendance, engagement, and achievement, in both school-based and national measures (see Bishop et al., 2007; Bishop et al., 2011, Bishop et al., 2012; Meyer et al., 2010).

The centrality of relationships to pedagogy is shown by Hattie (2003a) when using reading test results prepared as norms for the asTTle formative assessment programme.[4] He found that achievement differences between Māori and Pākehā remained constant regardless of whether the students attended a high- or low-decile[5] school. Hattie concluded that it is not socioeconomic differences that have the greatest impact on Māori student achievement. Instead, he suggested that "the evidence is pointing more to the relationships between teachers and Māori students as the major issue—it is a matter of cultural relationships not socio-economic resources—as these differences occur at all levels of socio-economic status" (p. 7).

Further, in his book *Visible Learning*, Hattie (2009) quotes a meta-analysis published in 2007 by Cornelius-White based on 119 studies with 1,450 effects, surveying 355,325 students, 14,851 teachers and 2,439 schools. In this analysis "[h]e found a correlation of 0.34 ($d = 0.72$) across all person-centered teacher variables and all student outcomes (achievement and attitudes)" (p. 118). Hattie (2009) concludes that in classrooms

> with person-centered teachers, there are more engagements, more respect of self and others, there are fewer resistant behaviours, there is greater non-directivity (student initiative and student-regulated activities), and there are higher student achievement outcomes. (p. 119)

4 asTTLe (Assessment Tools for Teaching and Learning) are norm-referenced assessment tools that are used for both formative and summative purposes in New Zealand schools.

5 Decile ranking of schools is related to the socioeconomic status of the population group living in the contributing community.

Dempster (2011) supports this notion when considering the determinants of student leadership in schools (and thereby identifying the keys to improving student achievement). He suggests that

> it is the immediacy of the sense of connection and belonging they experience with their teachers and their peers that governs the sense of identification students have with their schools. Only then is engagement in all aspects of learning, curricular and co-curricular, enhanced, and once this occurs, the desire to take on leadership responsibilities in matters of school citizenship is elevated. (p. 97)

Dempster continues by suggesting that

> how well children and young people are treated by their families, teachers and peers is a fundamental influence on how well they become connected to their schools. Furthermore, there is support for the proposition that experience of reasonable empowerment and a climate of participatory social engagement (both factors influencing leadership), are known to develop in students the very social, emotional and cognitive attributes that facilitate improvements in academic achievement. (p. 97)

Hence the notion that school improvement needs to commence by supporting teachers.

Many authors, including Hattie (2003a), Alton-Lee (2003), Bosker and Witziers (1995), Cuttance (1998, 2000) and Phillips, McNaughton and MacDonald (2001), are clear that, in the words of an OECD[6] report, "pedagogy and learning practices" are "key educational policy levers" (Organisation for Economic Co-operation and Development, 2002, p. 3). For example, the large meta-analyses by Hattie (2003a, 2003b, 2009) and Alton-Lee (2003) identify that the most important systemic influence on students' educational achievement is the teacher. This is not to deny that other broad factors—such as the prior learning and experiences the child brings to school, the socioeconomic background of the child and their family, the structures and history of the school and the socially constructed impoverishment of Māori people created by the processes of neo-colonisation—are not important. But, as Hattie (2009) suggests, teacher effectiveness stands out as the most easily alterable factor within the school system. Logically, it is the classroom that is the most useful site for the provision of professional learning opportunities for teachers when seeking to change the learning culture in schools and to reduce the persistent disparities in educational achievement. Further, as Elmore (2004) shows, those schools that commence reform in the classroom and then change their school's systems and structures to support classroom changes, are those that see the greatest gains in student outcomes.

6 Organisation of Economic Co-operation and Development.

The Te Kotahitanga professional development cycle

The Te Kotahitanga PD cycle for teachers commences with a series of formal and informal introductory meetings, at which the project is outlined to each school's leaders and staff. Once the school agrees to take part, the PD for teachers continues through a sequence of activities conducted by experienced and practised in-school facilitators.[7] These activities involve:

1. the induction workshop for teachers and principals, termed the hui whakarewa, which is followed by a term-by-term cycle of the following four specific but interdependent activities:
2. individual teacher in-class observations using the Te Kotahitanga observation tool
3. individual teacher feedback and co-construction sessions reflecting on specific events observed in the formal observation
4. group co-construction meetings for the teachers of a common class, reflecting on student participation and achievement evidence, with focused group goal setting
5. targeted shadow-coaching sessions in order to move towards targeted goals (from feedback and co-construction sessions).

In addition, staff are involved in 'new knowledge,' 'new strategy', or 'new assessment' PD sessions, which tend to be run by the school facilitation teams and leaders on a need-be basis. These five activities are explained in more detail below.

Activity 1: The induction workshop: The hui whakarewa

The first formal PD activity is the hui whakarewa. These induction hui (gatherings) are usually held at a local marae (a Māori residential meeting place) with elders present and actively engaged in the PD. A marae setting provides a space where Māori are the majority culture and 'normal', and it is also a location that constitutes a culturally appropriate context for Māori learning. The location allows each school to signal to their local Māori community that they are seriously engaged in addressing the educational achievement of their Māori students. These activities also open up ongoing lines of communication and accountability to the elders and parents of the Māori community. As schools participate in Te Kotahitanga over time, these hui are held annually in order to bring more teachers into the project, to reaffirm those already in the project and to maintain the links to the Māori families and their communities.

7 Experienced teachers are selected for these positions by the school's leaders to support their peers to implement the ETP in their classrooms. These facilitators are provided with in-depth and ongoing professional learning opportunities by the university-based professional developers. This support consists of both biannual out-of-school workshops as well as in-school shadow coaching and feedback.

When commencing the PD process at the hui whakarewa, teachers are introduced to the planning model for this part of the pedagogic intervention, known by the acronym GEPRISP. This acronym suggests that there is a need for teachers to acknowledge and highlight the specific ***goal*** of raising Māori student participation and achievement by means of a detailed examination of data on Māori student participation and achievement. Māori students' ***experiences*** of education and those of their significant others using the original narratives of experience (Bishop & Berryman, 2006) are then worked through in a problem-solving exercise to allow teachers an opportunity to critically examine their own discursive ***positioning*** and its implications for classroom relations and interactions with Māori students.

It is a fundamental assumption of this project that until teachers consider how the dominant culture maintains control over the various aspects of education, and the part they themselves might play in perpetuating this pattern of domination (albeit unwittingly), they will not understand how dominance manifests itself in the lives of Māori students (and their communities) and how they and the way they relate to and interact with these students may be affecting learning in their classroom. Therefore, the PD devised by the researchers includes a means of creating a context for learning whereby teachers are supported to challenge their own thinking through the creation of a situation of cognitive and affective dissonance.

Timperley, Phillips and Wiseman (2003) identify such dissonance as being necessary for successful PD because it can lead teachers to a better understanding of the power imbalances of which they are a part. In this way, teachers are encouraged to consider the evidence presented to them in the narratives of Māori students and others in order to critically reflect on their own experiences in similar settings. Accordingly they are provided with supported opportunities to begin to reposition themselves discursively in ways that both acknowledge their own mana and rangatiratanga (status and self-determination) and enable them to start to realise their own agency; that is, their power to act. This critical activity provides opportunities for teachers to begin to identify and challenge their own discursive positioning so that they reject deficit thinking, characterised by statements such as "Until something happens at this school there is nothing I can do", or "These Māori students are just not up to it" and pathologising practices ("They need more remedial work, or special programmes", "They can't cope with this work").

The hui whakarewa then turns to examine those ***relationships*** of care, expectation and management, and the discursive ***interaction*****s** that are fundamental to creating culturally responsive contexts for learning. ***Strategies*** that can be used to develop relations of care and learning conversations are specifically introduced next, and indeed are also used as the model for presentation throughout the PD hui with teachers. The

importance of detailed ***planning*** to bring about change in classrooms, departments and across the school is then identified and illustrated.

A further model is provided for teachers to help them to implement, with the assistance of the facilitators, what they have learnt at the hui whakarewa. In this second model, the order of GEPRISP is reversed into PSIRPEG (the P is silent), whereby teachers focus classroom and lesson ***planning*** that will use ***strategies*** to promote discursive ***interactions*** in their classrooms, which in turn will develop caring and learning ***relationships*** that will reinforce teachers' agentic, discursive ***positionings***. Together these in turn work towards improving Māori students' educational ***experiences*** in ways that promote the ***goal*** of improving Māori students' educational attendance, engagement, participation and achievement.

Activity 2: Te Kotahitanga observations

The Te Kotahitanga observation tool (Bishop et al., 2003, 2007) is designed to help teachers begin to implement the ETP in their classroom by providing them with information and targeted feedback about their planning, strategies used, relationships established in the classroom and range of interactions used, along with information about student participation and performance. Regular formal observations provide details of classroom interactions as they relate to the ETP, including:

- student engagement and work completion
- teacher and student location in order to identify the zone of physical interaction (Philpott, 1993)
- the cognitive level of the class and the lesson (to identify expectation levels).

These final two components are co-constructed between the observer and the teacher. The observation tool also seeks to objectively quantify evidence of the relationships that are specified in the ETP, as observed within the classroom lesson. Again, this is done in collaboration with the teacher. This tool acknowledges that there are many factors within the learning environment that contribute to student behaviour and learning. The broad scope within which observations are made enables effective and meaningful feedback and reflection on a range of solutions for all participants.

Activity 3: Individual teacher feedback

At previously negotiated times following the classroom observations, facilitators give teachers specific feedback about the lesson they have formally observed using the observation tool. Facilitators and teachers talk about their in-class experiences and begin to co-construct new directions in terms of setting individual goals to improve the participation and engagement of Māori students in their classrooms. Facilitators ensure that feedback sessions are based specifically on the events recorded or annotated

during the classroom observation and conclude with reminders about, or links to, their next co-construction meeting. The feedback sessions normally take one to one and a half hours, and in the early stages of the project consist of feedback being given to the teacher by the facilitator. However, as the teachers become familiar with the observation data and the inter-relatedness of the various components observed, these sessions become more interactive. Indeed, there is a developing continuum of response by the teachers to these data.

Activity 4: The co-construction meetings

The co-construction meetings (with the associated follow-up shadow coaching, see below) are facilitated, collaborative, problem-solving opportunities for a group of teachers who (ideally) work with a common group of students in a target class and who come from different curriculum areas. The aim is for a group of teachers to collaboratively examine evidence of Māori (and other) students' participation and progress with learning and to develop plans and strategies that will promote discursive interactions and caring and learning relationships, and will improve those students' educational experiences, participation and achievement. In terms of Timperley's (2003) definition, these meetings are effectively professional learning communities in that they display the following characteristics:

- a collective engagement in reflective dialogue, whereby teachers examine research and link this to practice
- a collective focus on student learning and achievement, whereby data are used to reflect on the effectiveness of teaching
- a sharing of expertise in order to critically examine practices and evidence of student participation and achievement, and to develop skills and knowledge to engage in joint planning of future goals and strategies
- a deprivatisation of practice, whereby teachers learn from peer coaching, structured observations and the sharing of classroom data from dialogue, interaction and feedback from colleagues, and
- a sharing of values and expectations about learning and achievement.

The group has a body of collectively agreed professional beliefs so that there is a collective vision of where they are going, what is important, how to achieve what is important and who is responsible for achieving these goals.

In-school facilitators ensure the teachers feel at ease and understand that what was discussed in their individual feedback session is confidential and will not be shared with the others unless they themselves choose to share any issues that are raised. Co-construction meetings are not linked to performance appraisal, nor are they designed to demean or to glorify individuals. The co-construction process is about improving Māori student achievement by creating a context in which teachers work collaboratively,

assisted by a facilitator, towards improving or maintaining positive relationships with Māori students and moving towards using more culturally responsive and discursive teaching and learning interactions in classrooms.

The teachers in the co-construction group are given space to reflect on and share evidence of Māori students' classroom participation, achievement and progress, drawing on learning resulting from their classroom practice. Such evidence may well relate to their last personal and/or group goals, and may include student class attendance patterns, student engagement data, examples of student work, teacher-collated pre- and post-test data, or data from standardised norm-referenced tests. Co-construction meetings conclude by setting times and dates with the facilitator for shadow coaching to further support the implementation of their newly set goals.

Activity 5: Shadow coaching

Shadow coaching involves the in-school facilitators supporting individual teachers to meet their personal and group goals by coaching them in their classroom or other environment in which work towards the goal is naturally likely to occur. This might involve collaboratively planning lessons, making adaptations to the learning environment or curriculum, or physically modelling steps towards the goal, but it is more likely to involve giving the teacher another opportunity for feedback and reflection on observed classroom interactions.

By 2005 we had developed the whole GEPRISP process as a series of feedback loops between the major participants in the project. Such a network of relationships was identified by an academic, Gene Hall, (personal communication, October 2007) as being an 'output' model, where the attempts by the learner to understand and make progress are responded to by a more knowledgeable other, as opposed to an 'input' model, where an 'expert' outsider tells the teacher what needs to be done. In the output model, the PD process becomes interactive and discursive, thus replicating the patterns of interaction being developed in the classroom. This means that outputs—in the form of evidence of thinking, theorising and explanations—are used by the recipient to provide feedback or feed-forward to the learner. More commonly, from our experience this feedback loop approach creates a learning relationship where co-construction of learning takes place, and where both parties collaborate to determine how practice at all levels of the model might be modified in the light of evidence of current performance.[8]

8 Details of the first 2 years of this phase are contained in Bishop et al. (2007); the next 2 in Bishop, Berryman, Cavanagh et al (2008), as well as in Timperley et al. (2007). The outcomes of research and development from 2008 to 2010 are presented in Bishop et al. (2011), and the external evaluation of the project is to be found in Meyer et al. (2010). Further examples and reports are to be found at www.tekotahitanga.tki.org.nz and www.educationcounts.govt.nz

Te Kotahitanga Phase 3

In Phase 1, in 2001, the innovation was implemented with a group of 11 teachers in four schools. It resulted in improved learning, behaviour and attendance outcomes in the classrooms of those teachers who had been able to participate fully in the PD (Bishop et al., 2003). The results were sufficiently encouraging for the project to be expanded to Phase 2, which commenced in 2003. However, in this phase, rather than working with a small number of teachers, we decided that it was more useful to work with as many staff as possible in a school in order to provide a common schooling experience for Māori students from one classroom to the next.

In late 2003 the project commenced in 12 secondary schools, which became known as Phase 3. These schools ranged from large to small, urban to rural, single sex to co-ed, high decile to low decile, and those with a high proportion of Māori students to those with a low proportion. In this phase the ETP was implemented in a manner that prioritised discursive re-positioning and changing teachers' skills and knowledge so that they were able to connect curriculum content knowledge to students' prior experiences and cultural understanding.

The schools in Phase 3 were invited to apply for entry into the project by local Ministry of Education officials from a selection of ongoing schooling improvement programmes. Once schools undertook to participate in the project, they selected a facilitation team, which consisted of school staff released for the task, augmented by staff from the Schools' Advisory Services and Resource Teachers: Learning and Behaviour (RTLB) support teams. These teams were provided with focused PD by the University of Waikato's research and development team to undertake a series of baseline data-gathering activities and teacher-specific PD activities in their schools. The in-school facilitators helped teachers to understand how they could bring about change in their classroom practice so as to develop caring and learning relationships within responsive social contexts that give learners opportunities to initiate, and that provide co-operative learning contexts and opportunities for responsive feedback to enhance students' achievement (Tavener & Glynn, 1989). The power to decide what the focus of an interaction might be, as well as how to initiate, maintain and end that interaction, was exercised jointly and collaboratively.

The roles of teacher and learner in this type of learning context are interchangeable and reciprocal. This reciprocity is embedded in the Māori concept of ako (Pere, 1994), whereby each can learn from and be supported by the other. This knowledge of practice further ensures a growth in teachers' "capacity to create settings in which that understanding occurred consistently for most students" (Elmore, Peterson, & McCarthey, 1996, p. 229). Evidence from the Te Kotahitanga project team (Bishop et al., 2007) and the external 3-year evaluation of the project (Meyer et al., 2010) shows

that facilitators have assisted the majority of teachers (75%) to embed the ETP in ways that demonstrate that those teachers are now able to engage in what Elmore et al. (1996) term "teaching for understanding".

The provision of these new support people—the in-class facilitators—has become a central part of the programme. In Phases 1 and 2 this function was undertaken by the university-based research and development team. However, expanding the project to the 12 schools in Phase 3 meant that it became necessary to expand the number of people engaged in this function. There were a number of external experts who were already available, but the project team insisted, in the interests of the sustainability of the reform (Hargreaves & Fink, 2006; Timperley et al., 2007) that in-school staff be the leaders, hence the development of the role of the lead facilitator. The provision of a cadre of professional developers within the school as opposed to outside experts visiting schools has become an important component of the project, one that if it were to be removed now would mean that the central institutions of the project (see below) would not be able to be developed and maintained.

The role of a professional developer within the schools is important because, as Elmore et al. (1996) observe, although many teachers are keen to try out new approaches in their classrooms, it is "extraordinarily difficult to get teachers to engage in sustained reflection and criticism of their own work that leads to fundamentally different ways of teaching" (p. 233). And, as Timperley et al. (2007) argue, most professional learning opportunities for teachers are provided outside of their classrooms—indeed, outside of their schools—and they are expected to make sense of these experiences once they return to their own classrooms. The addition to the school of a group of facilitators whose task it is to support staff to implement the ETP in their classrooms has been an essential structural/organisational support provided for teachers. Initially this is covered by project funds; then gradually, as central government funding diminishes, the expectation is that schools will fund these positions themselves.

Leaders' responses to the pedagogic intervention: Leading the school-wide reform, 2003 to 2009

The evidence cited in Meyer et al. (2010) and Bishop et al. (2011) demonstrates that the initial focus of the reform on changing pedagogy was successful in that, overall, the majority of teachers (75%) changed their theorising and teaching practice to more closely approximate that recommended in the ETP in their classrooms. Strongly associated with these changes in teachers' theorising and practice were improved academic achievements by Māori students in project schools that were seen to be greater than those made by Māori students in similar non-project schools. This included them making twice the gains in the first level of national assessments compared with Māori students

in the national sample (Bishop et al., 2011). However, this does raise the question of what the leaders of the Phase 3 schools had done in response to the Te Kotahitanga pedagogic initiative. In other words, what was happening in the rest of the school in terms of goals, policies, structures, participation, evidence, institutions, and the overall culture of the school? We were interested in these questions because we were aware that the pedagogic intervention on its own was not sufficient for the gains being made to be sustained in these schools, and for the project to be scalable in both the existing and new sites. We were concerned about Sarason's (1996) warning that, despite the initial success of a reform, they tend to founder once external support and funding are withdrawn, personnel and policies shift, and competition for internal resources grows. We also had in mind Hargreaves and Fink's (2006) suggestion that for changes to be sustained there has to be an institutionalisation of the reform elements.

Central to this concern was the debate about the relationship between structural and pedagogic reform: which comes first? Elmore et al. (1996) are quite clear on this matter and suggest that "there probably is no single set of structural changes that schools can make that will lead predictably to a particular kind of teaching practice" (p. 238). By this they mean that simply creating new structures will not necessarily cause teachers to change their practice. This finding challenges a common assumption among reform advocates that making some specific changes in structure, such as reducing (or even increasing) class sizes or grouping students in different ways, will bring about changes in teaching practice, which in turn will lead to students learning in different ways and knowing different things. Elmore et al. (1996), along with Bruner (1996), suggest that this picture of structural changes leading teachers to change their practice is too simplistic. Teachers make decisions about how and what to teach, not as a result of the structure they are placed within but as the result of a complex internal conversation between their past practices, their judgements about what to teach (which are strongly influenced by their perception of those whom they are teaching, which is in turn influenced by their discursive positionings), deeply rooted habits of practice, and what they themselves think about what and how they should be teaching. As Elmore et al. (1996) conclude,

> the transformation of teaching practice is fundamentally a problem of enhancing individual knowledge and skill, not a problem of organizational structure; getting the structure right depends on first understanding that problem of knowledge and skill. (p. 240)

In other words, structural reform works most effectively when the reform creates conditions where changes in practice lead to changes in structure, and where school institutions, structures and organisations evolve in a responsive, flexible manner so as to be supportive of classroom reform. Indeed, the main finding from their detailed analysis of the relationship between structure and pedagogy in elementary schools

seeking to change teaching and learning by initially changing the structure of the organisation in which they worked,

> was that changing structure did not change practice, it only relabelled existing practices with new names. The schools that succeed in changing practice are those that start with the practice and modify school structures to accommodate it. (Elmore, 2004, p. 4).

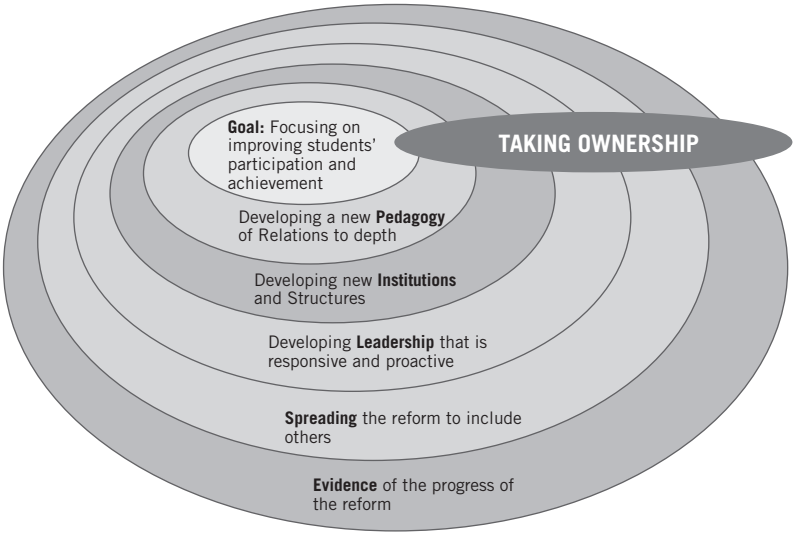
Hence we needed to examine what the Phase 3 leaders had done in response to the pedagogic intervention. To do so, we needed a model of evaluation. In Bishop and O'Sullivan (2005), and Bishop et al. (2010), we considered these theoretical and practical questions and developed a theory- or principle-based reform model that identified how school leaders could support the implementation of the ETP in their school's classrooms in a responsive manner. We chose to develop what McLaughlin and Mitra (2001) term a theory- or principle-based reform model, because such models are designed to counter the tendency for reforms to be eclipsed by new initiatives. They do so by having a motivating theoretical base which establishes core principles or norms of practice that define the change in terms of the theoretical foundations of classroom or school practices, rather than a recipe that needs to be followed without intellectual interaction by practitioners. This flexibility also allows the reform to be appropriate to and owned by practitioners in a wide range of settings and circumstances. In this way the theories and practices of the reform become embedded into the way the school is organised. What is crucial for this to happen is that the local participants are able to adapt and modify their actual activities in line with the reform's principles to make the reform relevant to their own setting. In other words, as Coburn (2003) notes, to ensure that the reform is sustained, schools, teachers, and students need to be able to take ownership of the reform in order to maintain the focus in the face of competing interests and agendas. This is often consolidated by in-school decision making which, as previously discussed, is important.

The model for sustainability that has been developed for Te Kotahitanga schools is based on that of Coburn (2003) and is known by the acronym GPILSEO. This identifies a number of dimensions of responsive change that leaders need to implement in order for pedagogic interventions to be embedded and sustained in their schools. The model suggests that although leaders need to support changing the ***pedagogy***, as per the original design of the project, they also need to:

- focus on establishing a vision and ***goals***, so that the whole school focuses on addressing the learning needs of Māori students and reducing educational disparities
- change the ***institutional*** arrangements of the school, which includes embedding the central institutions of the reform within the school

- distribute ***leadership*** tasks throughout the school
- ***spread*** the reform to more effectively include most staff and Māori families and their communities
- ensure the development and effective use of the school's data/***evidence*** management systems, and
- ensure the school takes ***ownership*** of the goals and means of reaching these goals developed in the project.[9]

Figure 1.1: GPILSEO: A reform initiative must have these elements from its inception



Source: Bishop & O'Sullivan, 2005, p. 69

In Table 1.1 the GPILSEO model is mapped onto the findings from the *School Leadership and Student Outcomes: Identifying What Works and Why* best evidence synthesis (BES) (Robinson et al., 2009) to illustrate how this understanding is supported by empirical research studies. The leadership BES is part of a programme led by Adrienne Alton-Lee to provide teachers and leaders with an evidence base to inform their policies and practice in New Zealand:

> The touchstone of the programme is its focus on explaining and optimising influences on a range of desired outcomes for diverse learners. The series of BESs is designed to

9 It is important to note that this model is an ideal type in that each dimension is explained separately. However, in reality these dimensions act in concert with each other in a dynamic, interdependent manner. Where schools start and what they include at which time is determined locally, but what is hypothesised in this model is that all the dimensions need to be engaged to ensure sustainability and scalability.

be a catalyst for systemic improvement and sustainable development in education. (www.educationcounts.govt.nz/topics/BES)

The leadership BES focuses on the influence of school leadership on student outcomes. This BES identifies those leadership activities that make a greater difference for students (see Table 1.1). The findings provide direction for leaders about where they can most effectively invest their time. What is most significant about this BES in the present context is that the only studies included were those that provided evidence, in either quantitative or qualitative form, of the relationship between leadership activities and academic and social student outcomes. Similarly, this is the key focus of the GPILSEO model: raising student achievement and reducing educational disparities.

Table 1.1: How GPILSEO relates to the leadership best evidence synthesis

Key features of leadership BES findings (Robinson et al., 2009)	Effective leadership of sustainable educational reform: Bishop & O'Sullivan, 2005; Bishop, et al., 2010
• Establishing goals and expectations	• Establishes and develops specific measurable ***goals*** so that progress can be shown, monitored and acted upon
• Planning, promoting and evaluating teaching and the curriculum • Promoting and participating in teacher learning and development • Using smart tools	• Supports the development and implementation of new ***pedagogic*** relationships and interactions in the classroom
• Ensuring an orderly and supportive environment	• Changes the ***institution***, its organisation and structures
• Creating educationally powerful connections	• ***Spreads*** the reform to include staff, parents, community, reform developers and policy makers so that a new school culture is developed and embedded
• Engaging in constructive problem talk	• Develops the capacity of people and systems to produce and use ***evidence*** of student progress to inform change
• Resourcing strategically	• Promotes and ensures that the ***ownership*** of the reform shifts are within the school

Source: He Kākano proposal[10]

Case study research design

In 2009 and 2010, using the GPILSEO model we sought to investigate what changes had taken place in the 12 Phase 3 schools in association with the changes that had occurred in classroom relationships and interactions over the 6 to 7 years these schools had been in the Te Kotahitanga project. In other words, we sought to learn about the degree

10 This table was first developed as part of a proposal submitted to the Ministry of Education for a leadership PD project that became known as He Kākano.

of implementation of the pedagogic intervention itself and the sorts of responsive structural reforms that school leaders had instituted in the various schools to support the pedagogic intervention. We also sought to ascertain what combination of the GPILSEO dimensions would ensure sustainability of the intervention, and from this information we were keen to identify what additional interventions would be needed if we were to extend the project to include a greater number of schools; that is, to take the project to scale. In short, we were interested in investigating how well the project had worked and how we could improve Te Kotahitanga as a model for reform. To do so we undertook detailed case study research into each of the 12 Phase 3 schools.

It is important to note that during the 6 to 7 years of the Phase 3 schools' inclusion in the project the project team took a non-interventionist approach to the relationship between teaching practice and structural support. By this we mean that apart from running workshops with school leaders on the need to reform the school to support classroom changes, there was no systematic attempt at this point by us to implement structural or organisational reform—or, the key to structural reform, leadership reform—in the schools in a formative, responsive manner. In other words, the main thrust of the intervention was on changing the pedagogy. The principals were included in this process and provided with separate professional learning opportunities of their own, but these did not include on-site, formative feedback sessions or opportunities to co-construct ways forward, as we had provided for the teachers. We were interested to see what had happened in these schools under these conditions.

For the case study research we used a mixed-methods approach (Creswell, 2005), in that both quantitative and qualitative data were gathered in order for us to identify the patterns in each school. For example, we needed to ensure that we were able to triangulate our data from a variety of sources through documentary analysis of each school's Education Review Office (ERO) reports[11] and schools' annual 'state of the nation' analyses,[12] which were provided to the research team by the in-school facilitation team's leaders.[13] In addition we made an inspection of students' outcome data in terms of attendance, retention, engagement and achievement (e.g., the proportion of Māori

11 ERO carries out an inspection of New Zealand schools every 3 years, and the subsequent ERO reports are made available for public scrutiny. We used the latest ERO reports on the schools to inform each case study.

12 'State of the nation' is a rather grand title for the annual compilation of data from schools that is collated by the facilitation team for presentation at the annual May workshop for facilitators. The purpose is to provide the R & D team with summative data and also to provide the facilitation team with data for planning purposes.

13 Each year Te Kotahitanga schools are asked to summarise their response to the core tasks associated with the project. This includes the number of teachers in the project, the time allocated to the project for each member of the facilitation team, how each component of the PD cycle is operating, something the school is proud of and something it is being challenged by in relation to Te Kotahitanga.

students in Year 11 obtaining the National Certificate of Educational Achievement (NCEA)[14] Level 1).

We also undertook semi-structured interviews with school leaders (principals, boards of trustees, heads of departments, deans, facilitators and other senior leaders) that sought to identify their position or role in the school, the degree of their involvement with Te Kotahitanga, their personal perceptions of the progress of the project's implementation in the school and its effectiveness (or otherwise), any changes in the school brought about as a result of the project, and their perceptions of the tasks and their involvement with the facilitation team.

Teachers were also interviewed, but for this activity we used the Levels of Use interview protocol developed by Hall and Hord (2006).[15] This protocol consists of two parts. The first part is a set of questions designed to elicit information about the teachers' knowledge of Te Kotahitanga in terms of whether they were acquiring, sharing, assessing, planning, status reporting or implementing this knowledge. The second part sought answers to open-ended questions that asked for teachers' reflections on the project, its implementation in the school, its strengths and challenges and the degree of effectiveness in meeting its aims. Levels of Use is very useful because it allows researchers to ascertain where most teachers are located on a continuum of implementation.

Group-focused, semi-structured interviews-as-conversations were also held with groups of Māori students. To ensure consistency, the interviews with students were undertaken by the same two researchers in each of the schools over 2 days, with students being nominated by the school as being representative of Māori students in each year group in each school.[16] All students had agreed to participate as volunteers. All qualitative interview material was transcribed and thematically analysed.

The case studies that follow in Chapters 2 to 4 are organised consistently. First, there is a section on the changes that have taken place in each school in teaching and learning. This is presented in three sub-sections. The first shows the changes that have taken place in teaching practice, based on the observations carried out by the in-school facilitators.[17] Next, changes in Māori students' schooling experiences are detailed,

14 NCEA refers to national external examinations for senior (Years 11 to 13) students.

15 Our staff were trained and accredited to use this protocol by Gene Hall on one of his visits to New Zealand in the mid-2000s.

16 The following areas were covered in these interviews:
What do you know about Te Kotahitanga?
What is it like to be a Māori student at this school?
In your experience, what do effective teachers do?
Explain how effective this has been for you.
How do your whānau find out what is happening with you at school?
Tell us about the leaders in your school.
What are your goals for the future?
How will what you have been learning impact on your goals?

17 For details on how these data are gathered, processed and analysed, please see Bishop et al., 2003, Bishop et al., 2007 and Bishop et al., 2011.

based on the interviews conducted during the school-visit phase of the case study research process. Third, we present details of changes in Māori student achievement using school and nationally generated data.

The rest of the case study reports consist of an examination of what the leaders have done in each school to maintain and sustain the gains made in changing teaching practice and Māori student schooling experiences and achievement. These generally follow the pattern of an examination of:

- the changes that have occurred in the leaders' thinking and practice
- the goals that have been set by the leaders, including *how* these goals were set
- changes that have occurred in the development and use of evidence systems
- changes that have taken place within the internal institutions, policies and structures of the school
- how the reform has been spread to include a critical number of staff, parents and community members, and
- changes in ownership of the goals established, which essentially means a change in the culture of the school.